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10/720,161	03/23/2004	Toshiya Shozaki	018775-884	4323

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WASHINGTON, JAMARES

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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		Application No.	Applicant(s)
Office Action Summary		10/720,161	SHOZAKI ET AL.
		Examiner	Art Unit
		Jamares Washington	2625

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 September 2007</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-24</u> is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Applicant's amendment and response received on September 21, 2007 has been entered.
Claims 1-24 are currently pending with claims 22-24 having been newly added. Amendments
and response are addressed hereinbelow.

Drawings

2.   Examiner understands the intent and purpose of Fig. 22 as pointed out by applicant as
showing images of differing qualities. However, all images depicted in Fig. 22 should not be of
"poor quality" as the transition between differing qualities should be clearly expressed.
Examiner suggests <u>larger</u> images to clearly express the transition of a poor quality image to a
higher quality image as shown in Fig. 22. Examiner maintains previous objection to Fig. 22.

Specification

3.   In light of the newly provided title, examiner has accepted and entered the amendment as
it is more indicative of the invention to which the claims are directed.

Claim Objections

4.   Claims 3, 11, and 17 are objected to under 37 CFR 1.75(c), as being of improper

dependent form for failing to further limit the subject matter of a previous claim. Applicant is

required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent

form, or rewrite the claim(s) in independent form.

Claim 3 recites "…wherein said input controller acquires the coded data first only at a

plurality of levels including the lowest level…" and depends from claim 2 (which depends from

claim 1) that recites "…which acquires the coded data by said input interface first only at a low

level…".

Claim 3 is thus broader in scope than that of claim 2 (which depends from claim 1). A

claim which depends from a subsequent claim can only be "limit" the subject matter set forth in

the previous claim as stated by 37 CFR 1.75(c). Claim 11 recites similar subject matter and

depends from claim 10. Examiner objects to claim 11 and 17 for the reasons provided for claim

3 above. Appropriate correction is required.

Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for

failing to further limit the subject matter of a previous claim. Applicant is required to cancel the

claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

claim(s) in independent form.

Claim 8 recites identical subject matter as that of parent claim 5 wherein the image

processing apparatus [further] comprises a print engine which prints the index image received

from said index make[r].

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this
or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-14 and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by

Yuuichi Bannai et al (US 5267052).

        Regarding claim 1, Bannai et al discloses an image processing apparatus (Fig. 1 image

communication terminal) which acquires coded data of a plurality of images from an external

recording medium (Col. 5 lines 54-57) recording hierarchically encoded data of the plurality of

images in the unit of hierarchically encoding (Col. 5 lines 57-64), the apparatus comprising:

an input interface which receives signals from an external recording medium (Fig. 1 numeral 5 communication control unit must have an input interface to connect to the communication network 12);

an image input controller (Fig. 1 numeral 5 communication control) which acquires the coded data by said input interface first only at a low level of the unit of hierarchical encoding from the external recording medium over the plurality of images (Col. 5 lines 54-60; wherein the image data has been subjected to progressive encoding);

a decoder (Fig. 1 numeral 9) which decodes the coded data acquired by said image input controller (Col. 6 lines 23-27); and

a storage device (Fig. 1 numeral 10) which stores data decoded by said decoder (Col. 6 lines 24-30).

Regarding claim 2, Bannai et al discloses the image processing apparatus according to claim 1, wherein the low level of the unit of hierarchical encoding is the lowest level (Col. 17 lines 67 through Col. 18 line 4; wherein in practical application of the aforementioned embodiment, icon image data is transmitted from the terminal before original image data. Explained at Col. 2 lines 64-67).

Regarding claim 3, Bannai et al discloses the image processing apparatus according to claim 2, wherein said input controller acquires the coded data first only at a plurality of levels including the lowest level of the unit of hierarchical encoding from the external recording medium over the plurality of images (Col. 5 lines 57-60 referencing "progressive encoding"

resulting in image data having first, second, and third stage encoded data therewith as described
at Col. 6 lines 61-68 and Col. 7 lines 1-3.)

Regarding claim 4, Bannai et al discloses the image processing apparatus according to
claim 1, further comprising a print engine which prints an image based on data decoded by said
decoder (Col. 8 lines 8-22; The printer as disclosed must have a "print engine" to be operable as
an output printing device).

Regarding claim 5, Bannai et al discloses the image processing apparatus according to
claim 1, further comprising:

an index maker (Given Fig. 4 and Col. 6 lines 23-32, there must exist an "index maker")
which makes an index image of the plurality of images based on the data at a low level of the
unit of hierarchical encoding on the plurality of images (Col. 6 lines 23-32);

a print engine (see rejection of claim 4) which prints the index image received from said
index maker (Col. 7 lines 54-56 and Col. 8 lines 3-5);

an operational device (Fig. 1 numeral 2 keyboard) which instructs to make an index to
said index maker (Col. 5 lines 42-47); and

a controller (Fig. 1 numeral 1 CPU) which allows to activate said index maker when
instructed by said operational device ("In FIG. 1, a central processing unit (CPU) 1 controls the
operation of the entire image communication terminal. A keyboard 2 inputs various kinds of
operation commands and character code data to the CPU 1" at Col. 1 lines 7-11) after data
acquisition of the data at a low level of the unit of hierarchical encoding is completed (Col. 5

lines 60-64 wherein the data is stored in memory 7 after the completion of reception. Memory 7

holds encoded image data as described in Col. 6 lines 23-32).

Regarding claim 6, Bannai et al discloses the image processing apparatus according to

claim 5, wherein said image input controller continues to receive data at higher levels of the unit

of hierarchical encoding for each of the plurality of images, after the data acquisition of the data

at the low level of the unit of hierarchical encoding is completed (Indicated by "The facsimile

receiving unit 318-2 decodes the original images received after storing the previously received

icon images in a storage unit 318-3…" in Col. 17 lines 37-39).

Regarding claim 7, Bannai et al discloses the image processing apparatus according to

claim 5, further comprising a display device (Fig. 1 numeral 3) which displays a state of data

acquisition of the coded data (Col. 17 lines 59-68 and Col. 18 lines 1-11 wherein the state of data

acquisition is displayed in the form of "icon" images" before receiving "original" images)

divided by levels of the unit of hierarchical encoding (The reception of the "icon" image before

receiving the "original" or higher resolution image reads on divided by levels of the unit of

hierarchical encoding).

Regarding claim 8, Bannai et al discloses the image processing apparatus according to

claim 5, further comprising a print engine which prints the index image received from said index

make[r] (Col. 7 lines 54-56 and Col. 8 lines 3-5).

Regarding claim 9, Bannai et al discloses an image processing method for acquiring

coded data of a plurality of images from an external recording medium which records

hierarchically encoded data of the plurality of images in the unit of hierarchically encoding (see

rejection of claim 1; Image processing apparatus carrying out the method), the method

comprising the steps of:

acquiring the coded data first only at a low level of the unit of hierarchical encoding from

the external recording medium over the plurality of images (see rejection of claim 1); and

decoding the coded data acquired from the external recording medium (see rejection of

claim 1).

Regarding claim 10, Bannai et al discloses the image processing method according to

claim 9, wherein the low level of the unit of hierarchical encoding is the lowest level (see

rejection of claim 2).

Regarding claim 11, Bannai et al discloses the image processing method according to

claim 10, wherein the coded data is acquired first only at a plurality of levels including the

lowest level of the unit of hierarchical encoding from the external recording medium over the

plurality of images (see rejection of claim 3).

Regarding claim 12, Bannai et al discloses the image processing method according to

claim 9, further comprising:

making an index image on the plurality of images based on the data at a low

level of the unit of hierarchical encoding on the plurality of images (see rejection of claim 5);

receiving an instruction by a user to make an index (see rejection of claim 5); and

activating the step of making the index image when instructed by the user after data

acquisition of the data at a low level of the unit of hierarchical encoding is completed (see

rejection of claim 5).

Regarding claim 13, Bannai et al discloses the image processing method according to

claim 12, further comprising the step of acquiring data at high level of the unit of hierarchical

encoding for each of the plurality of images, after the data acquisition of the data at a low level

of the unit of hierarchical encoding is completed (see rejection of claim 6).

Regarding claim 14, Bannai et al discloses the image processing method according to

claim 12, further comprising the step of displaying a state of data acquisition of the coded data

divided by levels of the unit of hierarchical encoding (see rejection of claim 7).

Regarding claim 21, Bannai et al discloses the computer readable recording medium

according to claim 18, the program further comprising the step of displaying a state of data

acquisition of the coded data divided by levels of the unit of hierarchical encoding (see rejection

of claim 7).

Regarding claim 22, Bannai et al discloses the image processing apparatus according to

claim 1, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the

encoder performs entropy encoding using arithmetic encoding which is a form of lossless

compression).

Regarding claim 23, Bannai et al discloses the image processing method according to

claim 9, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-63; wherein the

encoder performs entropy encoding using arithmetic encoding which is a form of lossless

compression).

Regarding claim 24, Bannai et al discloses the computer readable recording medium

according to claim 15, wherein the coded data is compressed data (Suggested at Col. 6 lines 61-

63; wherein the encoder performs entropy encoding using arithmetic encoding which is a form of

lossless compression).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannai et al

in view of Hiroshi Kajiwara (US 6985630 B2).

Regarding claim 15, Bannai et al discloses the method of acquiring coded data of a
plurality of images from an external recording medium which records hierarchically encoded
data of the plurality of images in the unit of hierarchically encoding, the method comprising the
steps of:

acquiring the coded data first only at a low level of the unit of hierarchical encoding from
the external recording medium over the plurality of images (see rejection of claim 1); and

decoding the coded data acquired from the external recording medium (see rejection of
claim 1).

Bannai et al fails to disclose or fairly suggest a computer readable recording medium
which records an image processing program for carrying out the above method.

Kajiwara, in the same field of endeavor, teaches the use of a computer readable recording
medium which records an image processing program for carrying out computer implemented
methods in an image processing apparatus (Col. 18 lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time the invention
was made for the method performed by the image processing apparatus as disclosed by Bannai et
al to utilize a computer readable recording medium which records an image processing program
so a computer or an apparatus may read and execute the program code stored to realize the
functionality of the hardware.

Regarding claim 16, Bannai discloses the computer readable recording medium according to claim 15 (see rejection of claim 15), wherein the low level of the unit of hierarchical encoding is the lowest level (see rejection of claim 2).

Regarding claim 17, Bannai discloses the computer readable recording medium according to claim 16 (see rejection of claim 15 for computer readable recording medium), wherein the coded data is acquired first only at a plurality of levels including the lowest level of the unit of hierarchical encoding from the external recording medium over the plurality of images (see rejection of claim 3).

Regarding claim 18, Bannai discloses the computer readable recording medium according to claim 15 (see rejection of claim 15 for computer readable recording medium), the program further comprising the steps of:

making an index image on the plurality of images based on the data at a low level of the unit of hierarchical encoding on the plurality of images (see rejection of claim 5);

receiving an instruction by a user to make an index (see rejection of claim 5); and

activating the step of making the index image when instructed by the user after data acquisition of the data at a low level of the unit of hierarchical encoding is completed (see rejection of claim 5).

Regarding claim 19, Bannai et al discloses the computer readable recording medium according to claim 18 (see rejection of claim 15 for computer readable recording medium), the

program further comprising the step of acquiring data at high level of the unit of hierarchical

encoding for each of the plurality of images, after the data acquisition of the data at a low level

of the unit of hierarchical encoding is completed (see rejection of claim 5).

   Regarding claim 20, Bannai et al discloses the computer readable recording medium

according to claim 18 (see rejection of claim 15 for computer readable recording medium), the

program further comprising the step of displaying that an image can be printed after data at the

high level of the unit of hierarchical encoding is acquired for the image (Col. 18 lines 25-30

wherein an icon image is selected and the original image is displayed and may be printed in

accordance with an indication from a keyboard), and of outputting the image based on the data

acquired on the image when instructed by a user (Col. 18 lines 25-27 wherein an icon is selected

and the original image is displayed).

Response to Arguments

10.   Applicant's arguments, see amendment after non-final, filed September 21, 2007, with

respect to the rejection(s) of claim(s) 1-14 under 35 USC 102(b) and claims 15-21 under USC

103(a) have been fully considered and are persuasive. Therefore, the rejections have been

withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view

of Bannai et al (US 5267052).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/   Jamares Washington
Supervisory Patent Examiner, Art Unit 2625   Junior Examiner
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March 5, 2008